



BEST AVAILABLE COPY

Application No.: 10/725,092  
Title: CABLE MODEM TERMINATION SYSTEM WITH FLEXIBLE ADDITION OF SINGLE OR DOWNSTREAMS

Inventor: RAKIB, et al.

Docket No.: TER-045

UPSTREAMS

1 / 17

# EOD HEAD-END ACCESS ARCHITECTURE

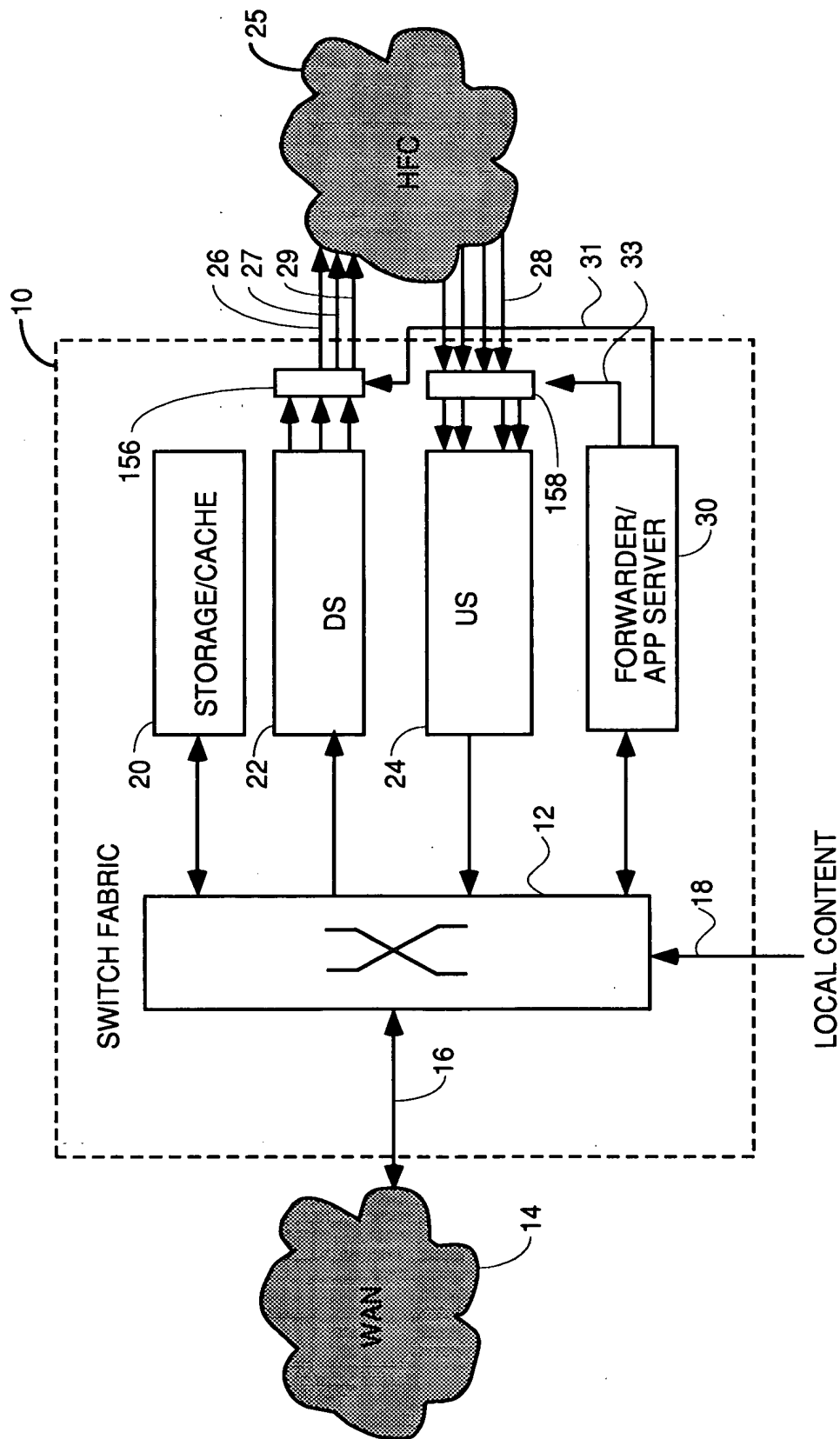
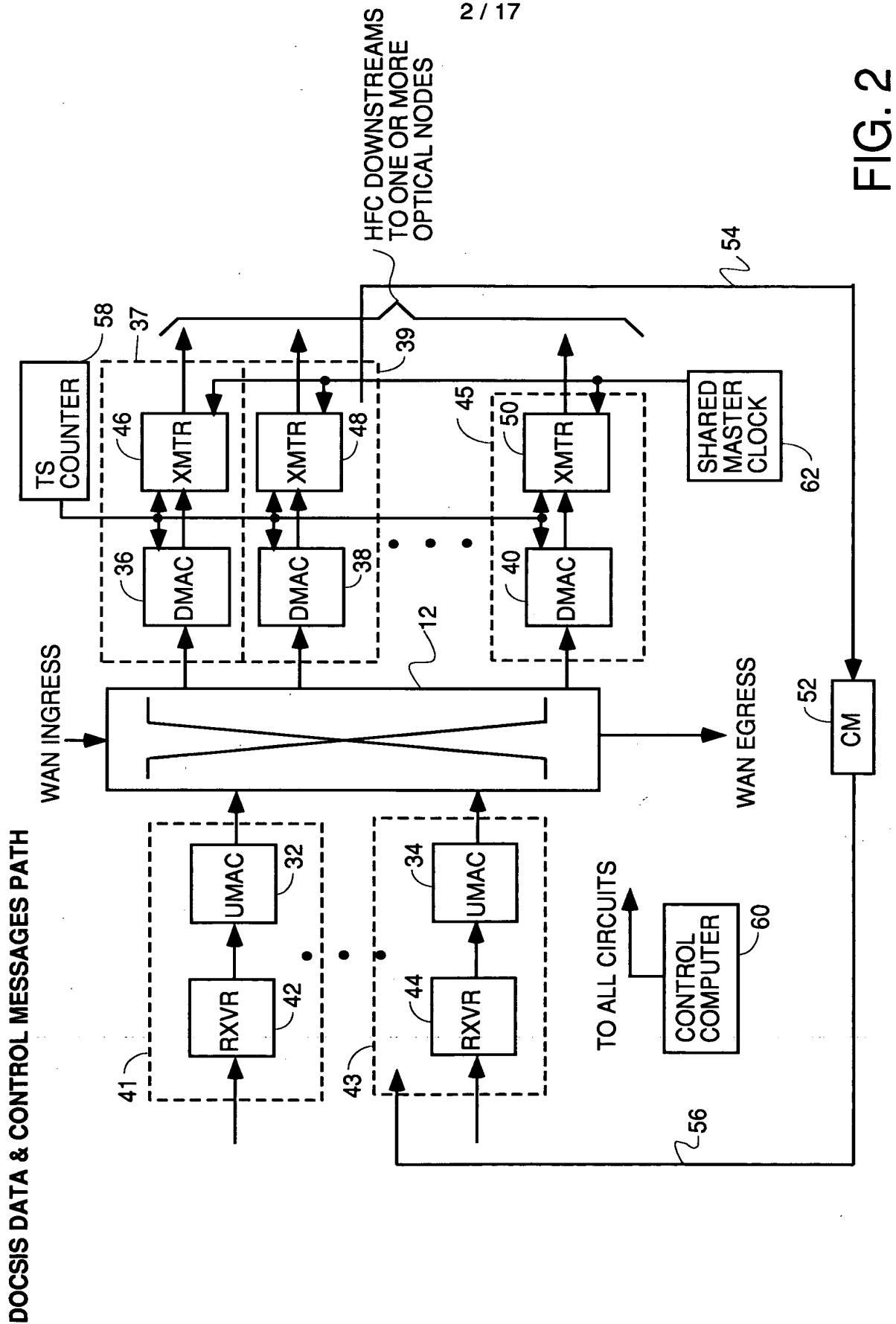


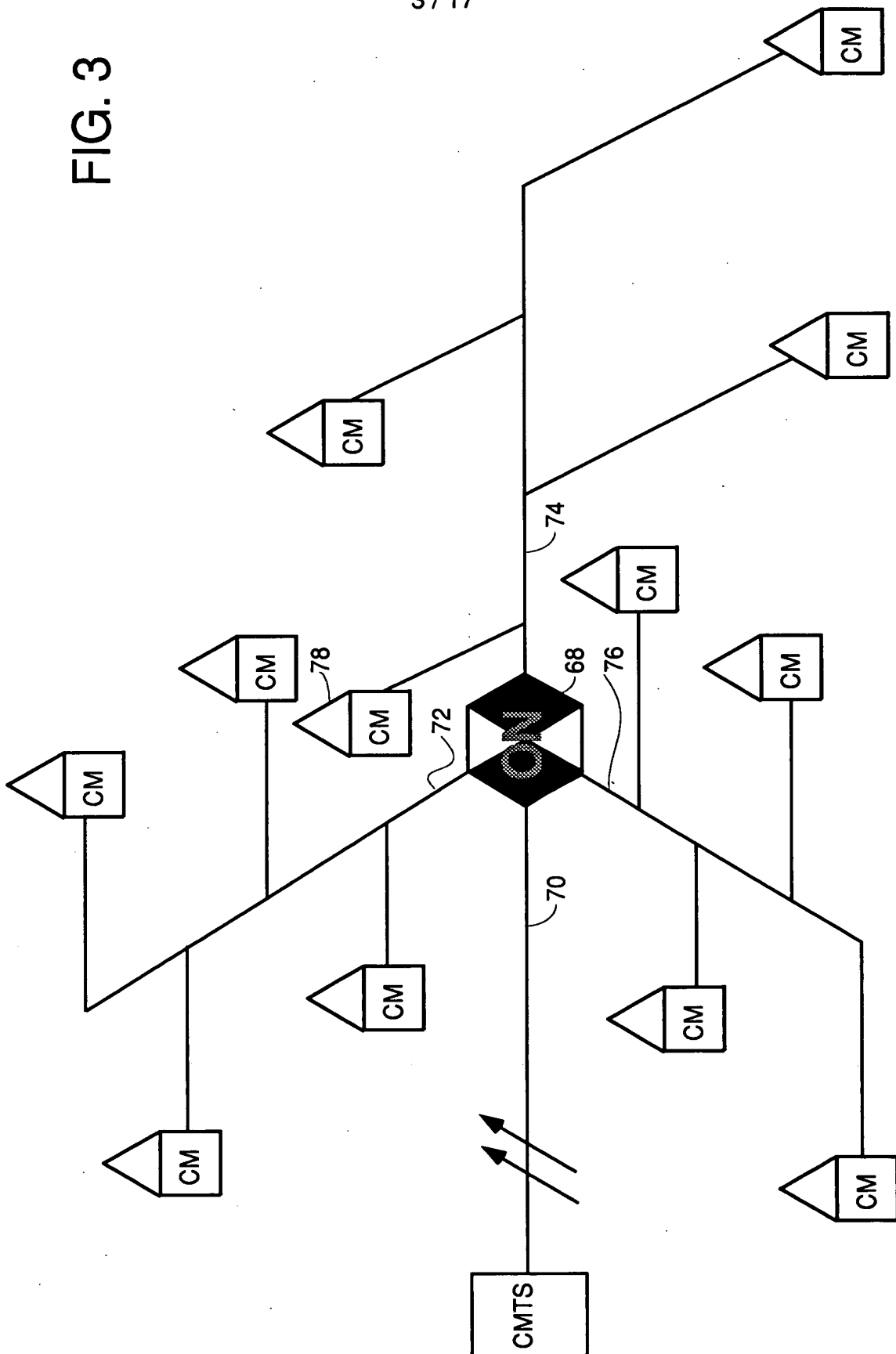
FIG. 1

2 / 17



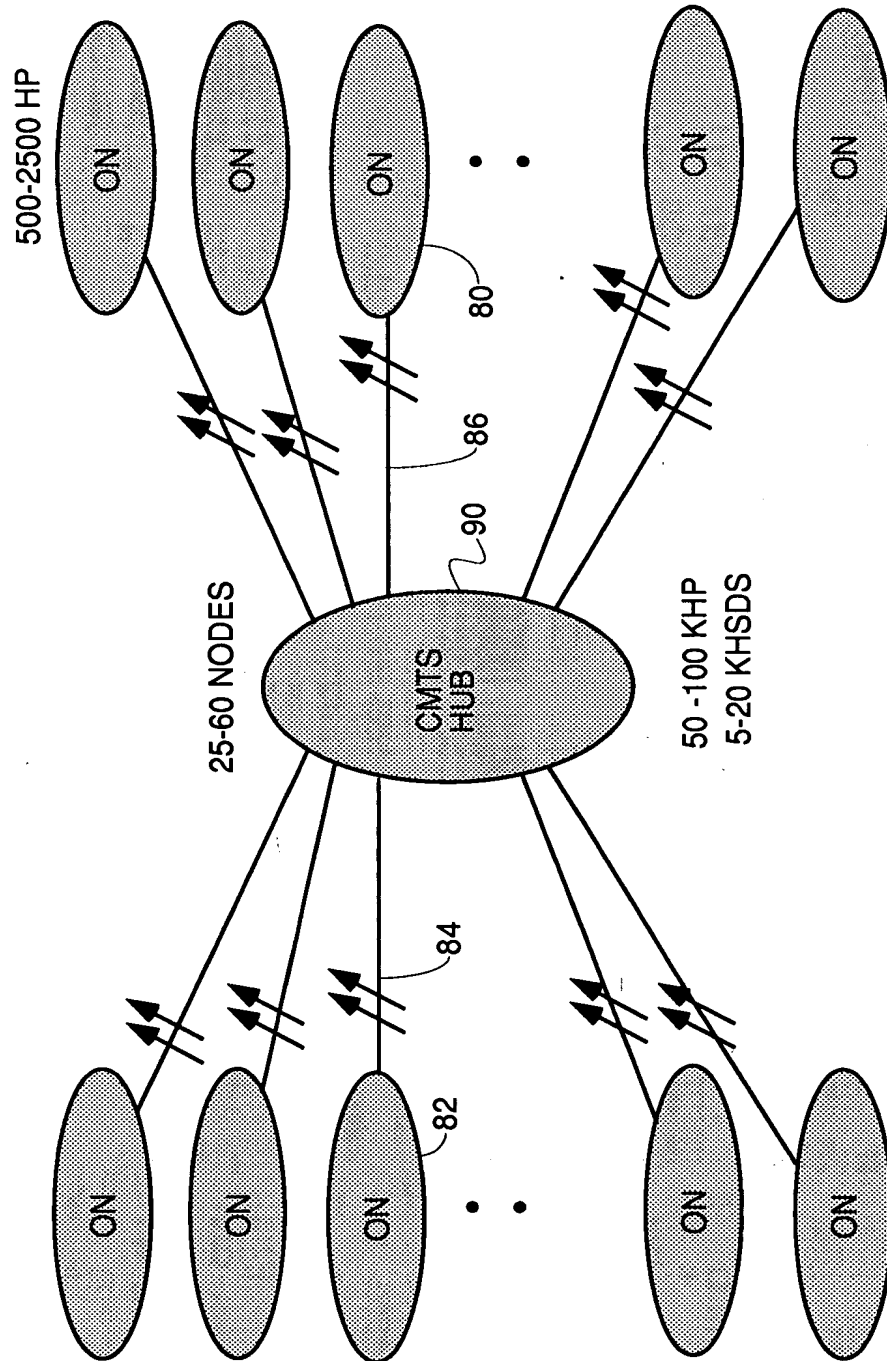
3 / 17

FIG. 3



4 / 17

HFC NETWORK - STAR TOPOLOGY



(ON: OPTICAL NODE)

FIG. 4

5 / 17

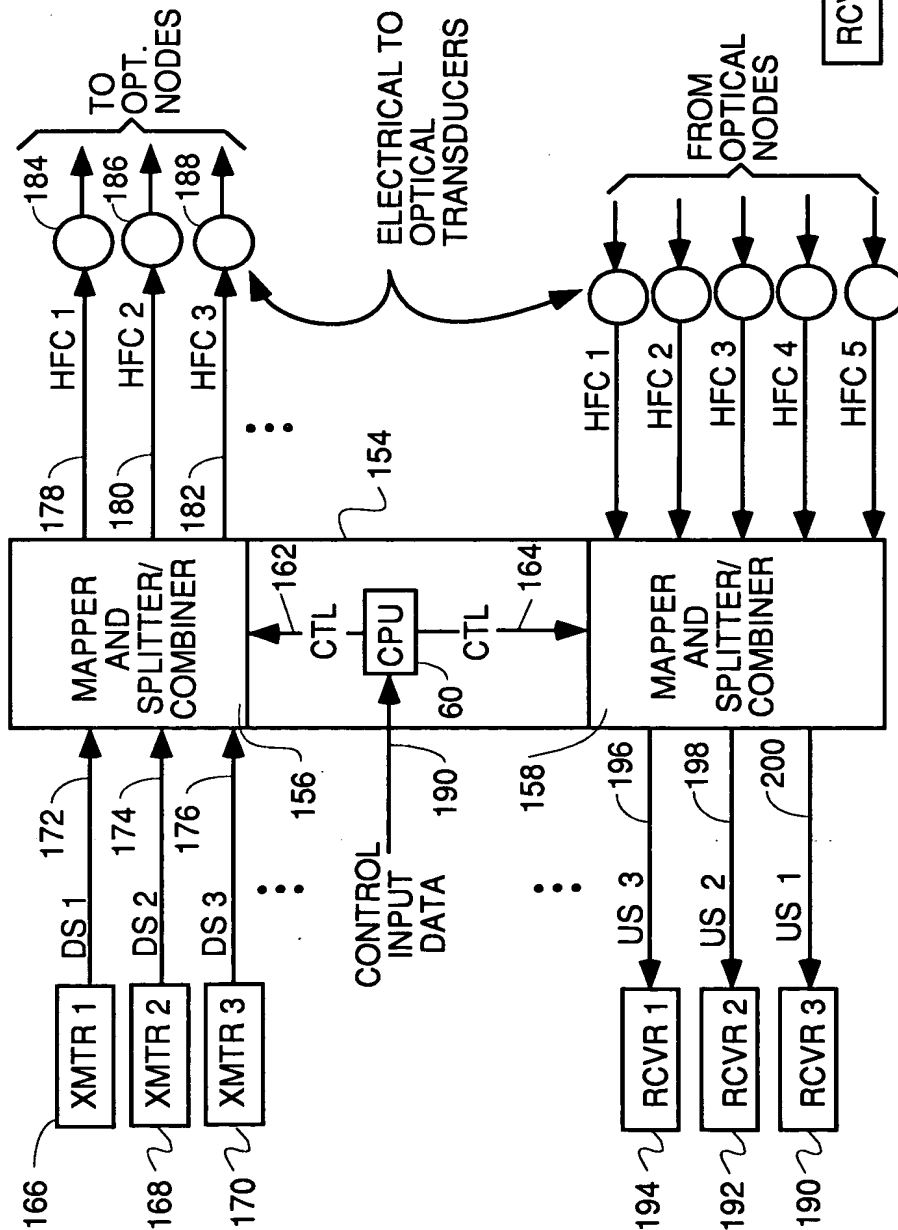


FIG. 5

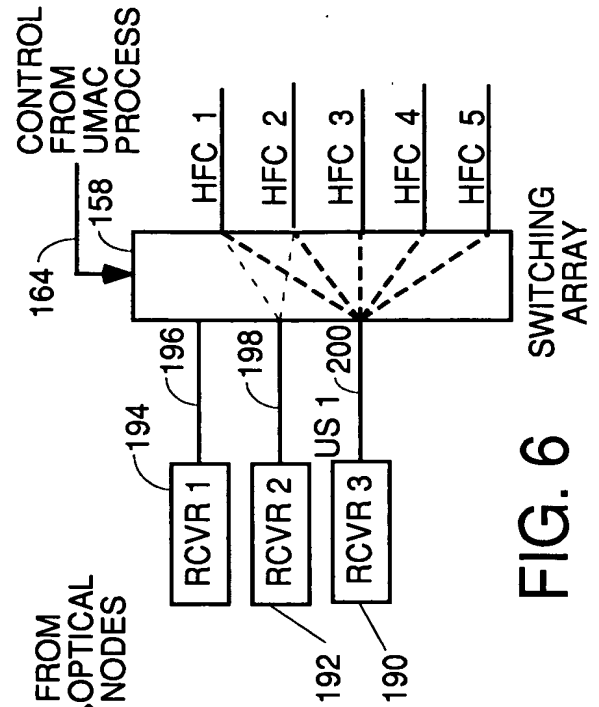


FIG. 6

6 / 17

NON OVERLAPPING BURSTS OVER MULTIPLE NODES

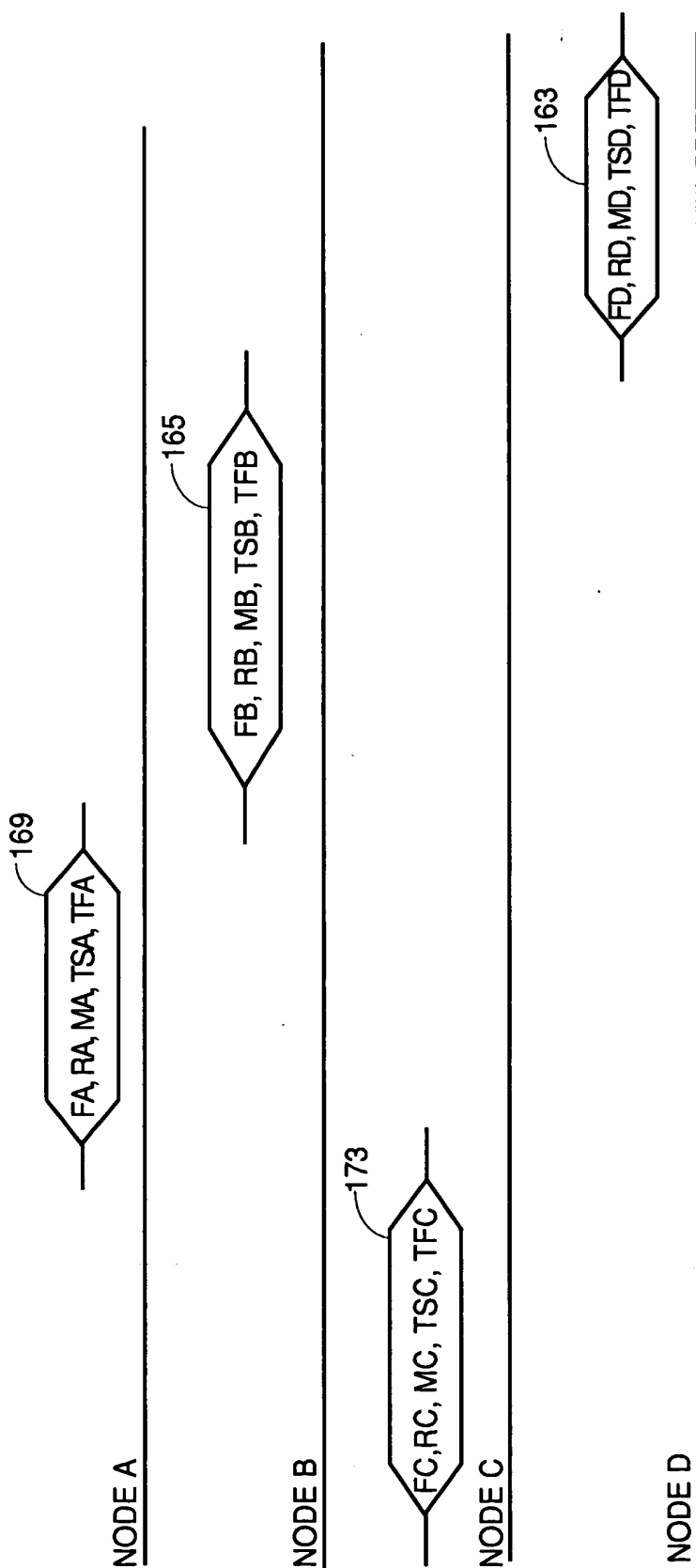


FIG. 7



FIG. 8

7 / 17

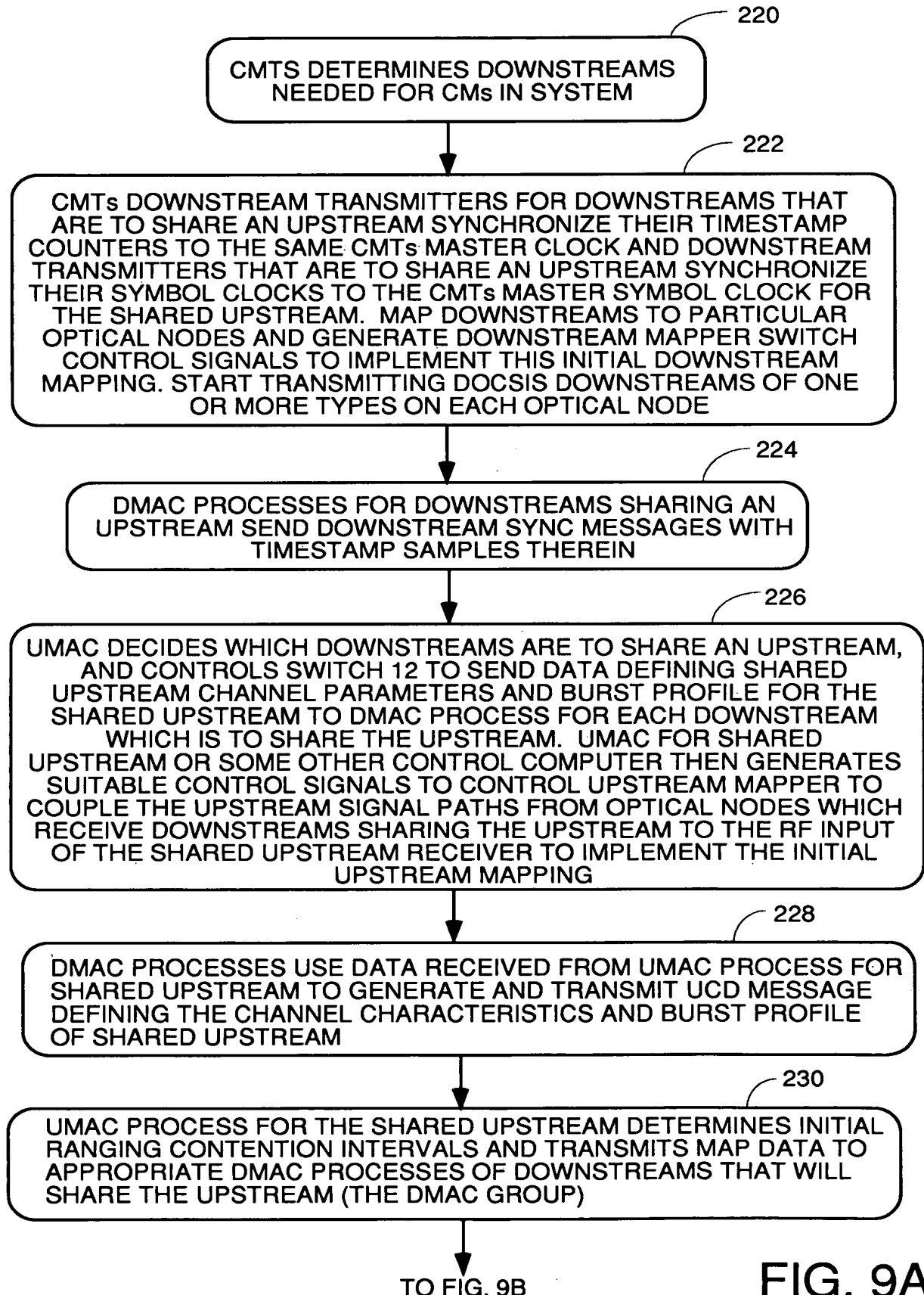
PROCESS TO CREATE AND CHANGE US/DS MAPPING  
IN THE PRESENCE OF NOISE AGGREGATION

FIG. 9A

8 / 17

↓ FROM FIG. 9A

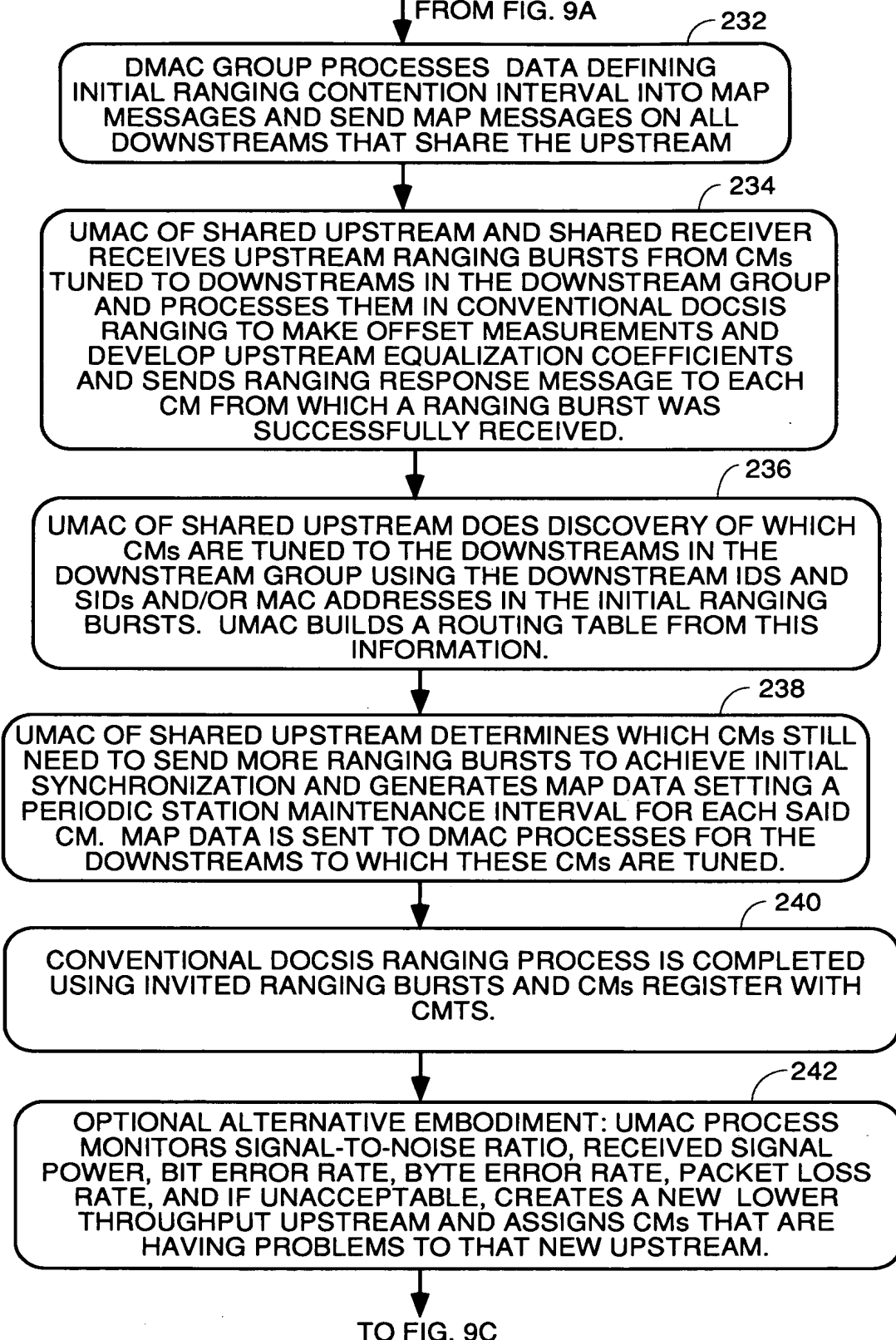


FIG. 9B



9 / 17

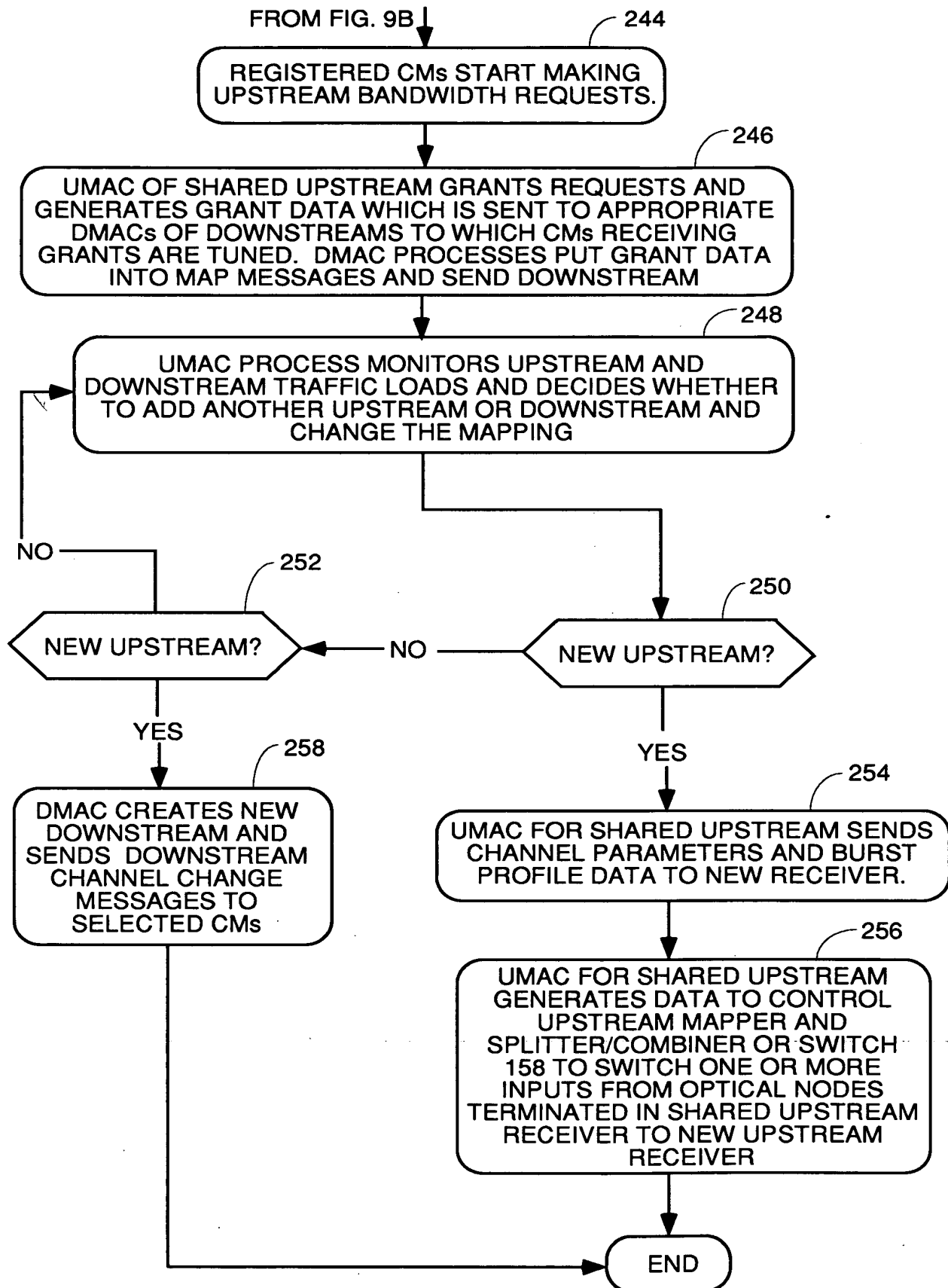


FIG. 9C

10 / 17

## PROCESS TO CREATE AND CHANGE US/DS MAPPING IN THE PRESENCE OF NOISE AGGREGATION

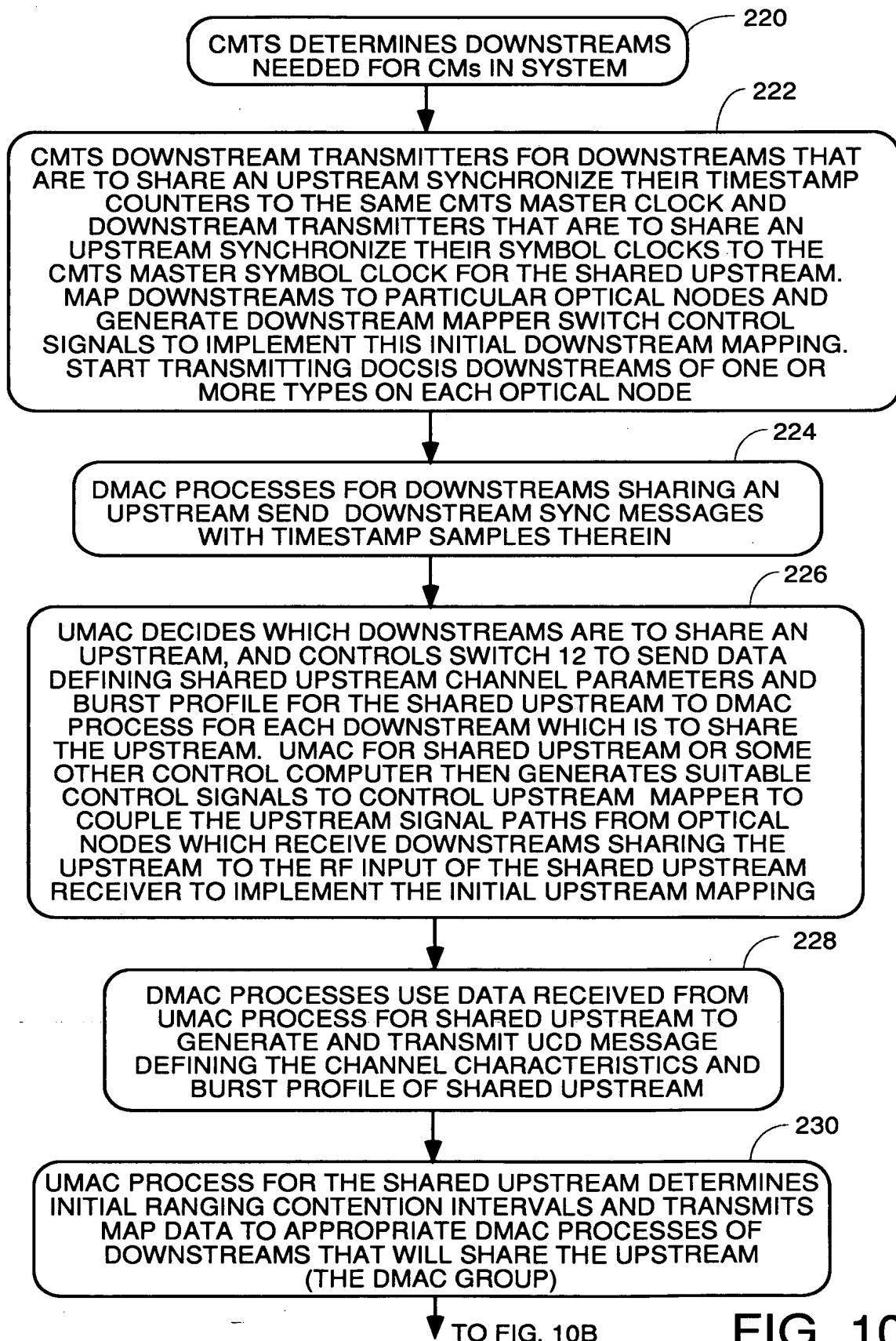


FIG. 10A

11 / 17

FROM FIG. 10A

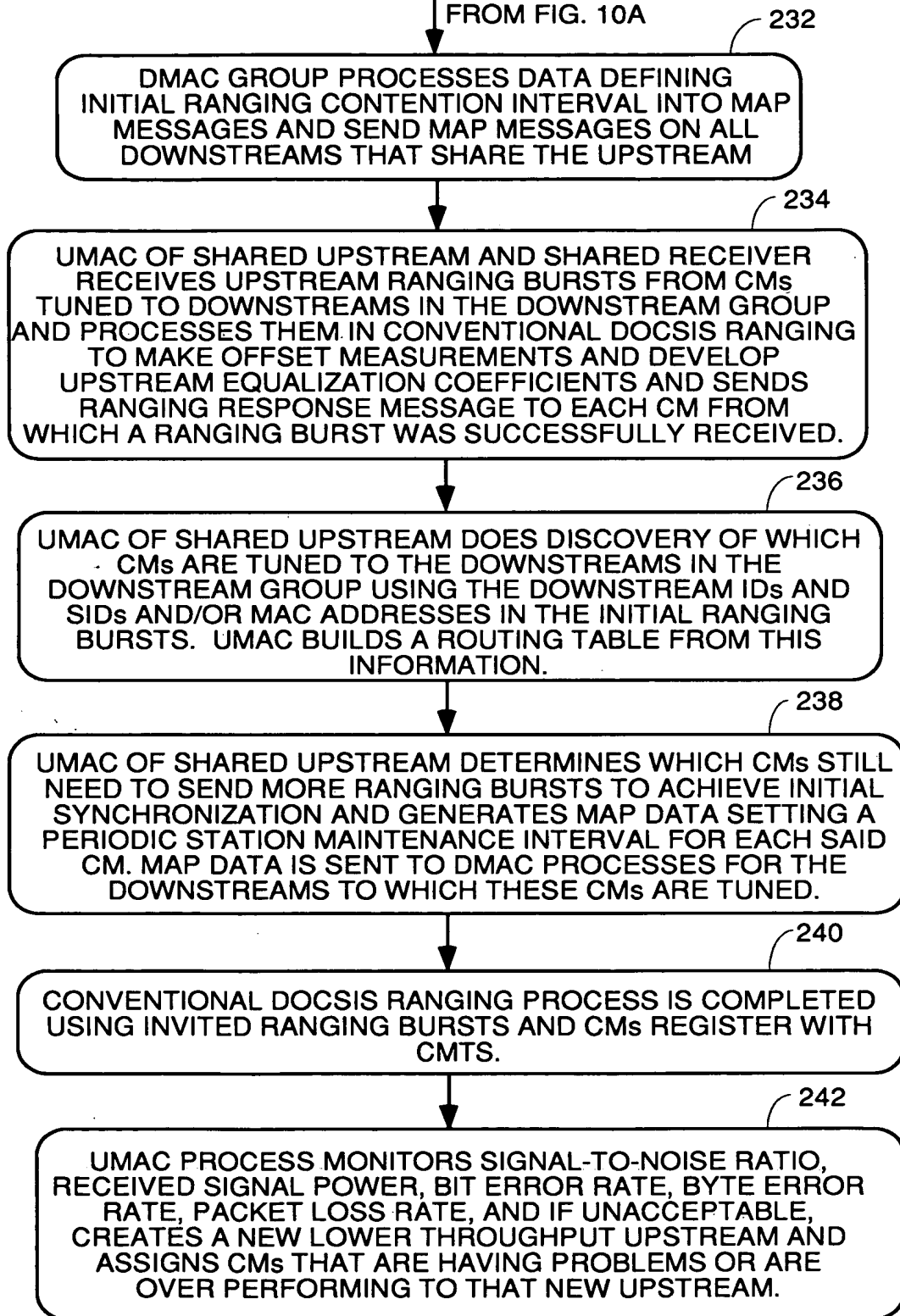


FIG. 10B

12 / 17

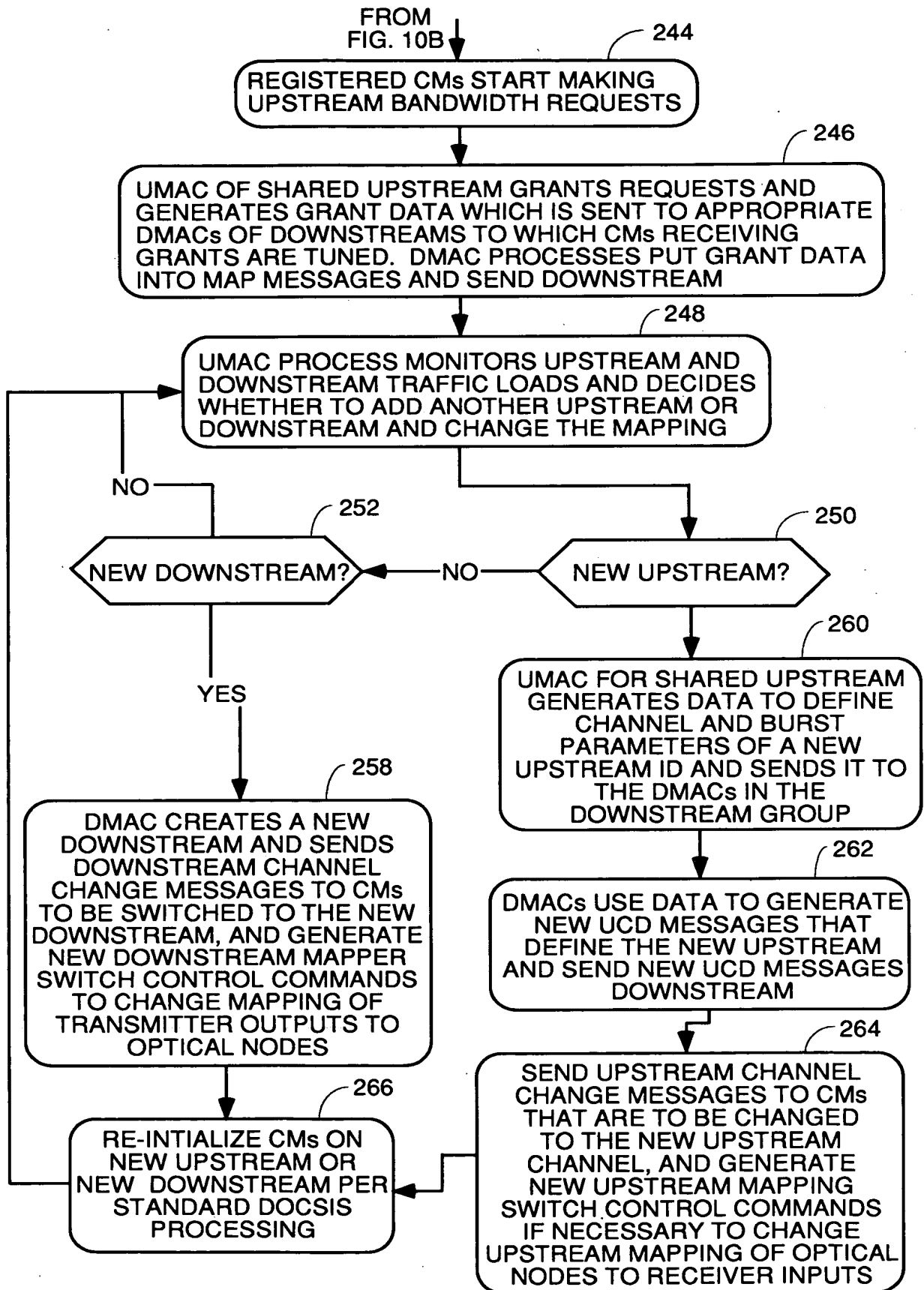


FIG. 10C

13 / 17

## PROCESS TO CREATE AND CHANGE US/DS MAPPING WITHOUT NOISE AGGREGATION

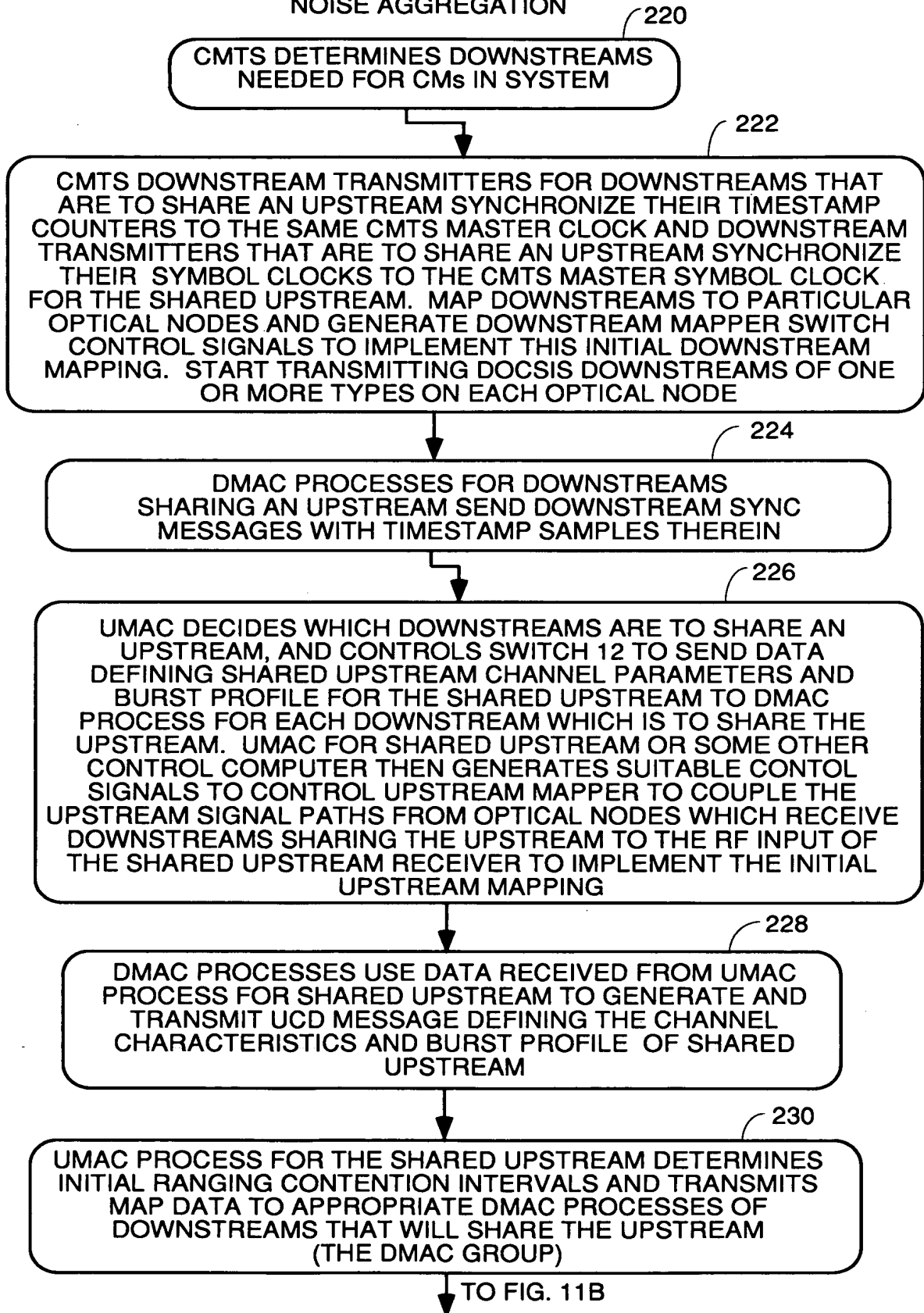


FIG. 11A

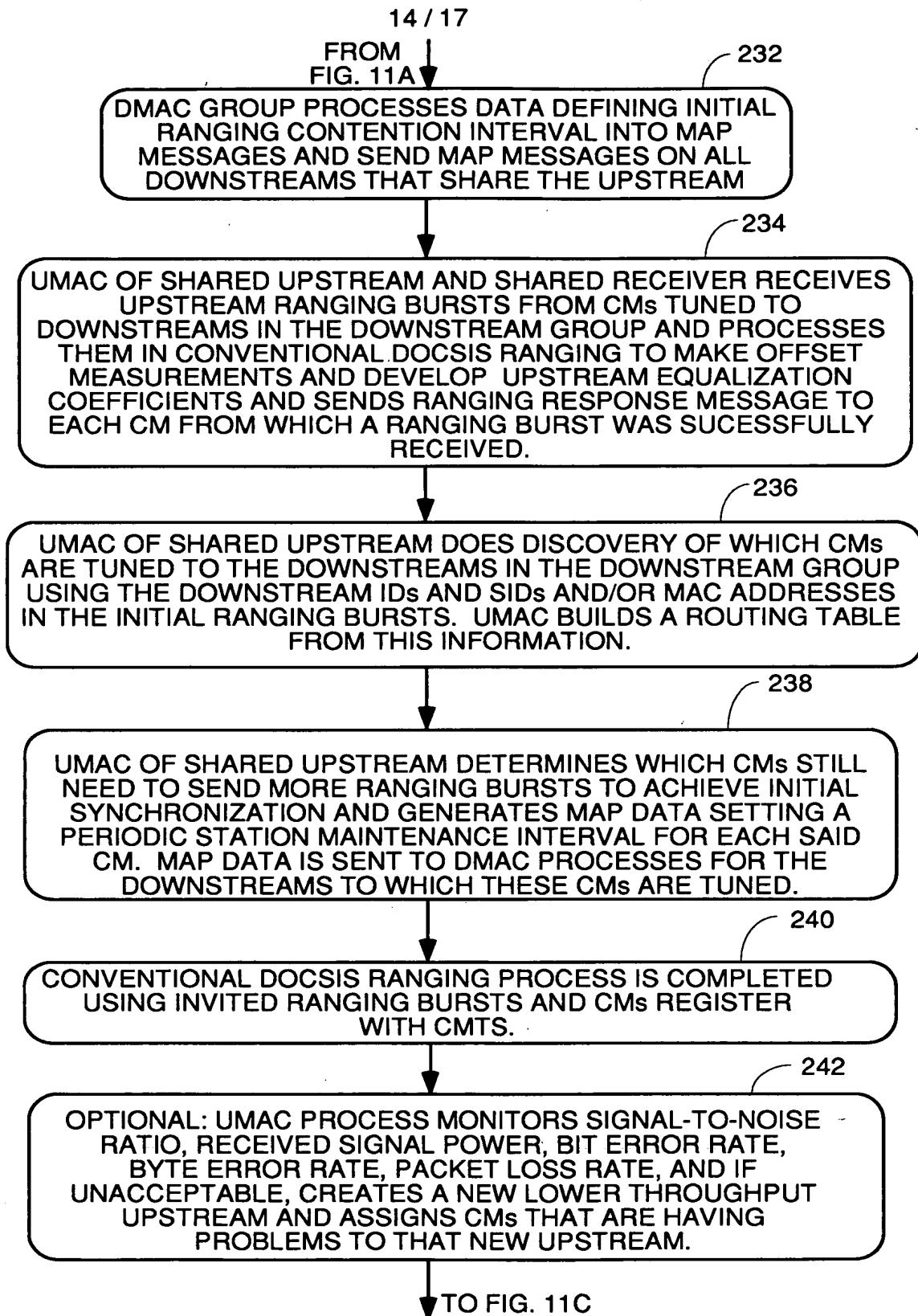
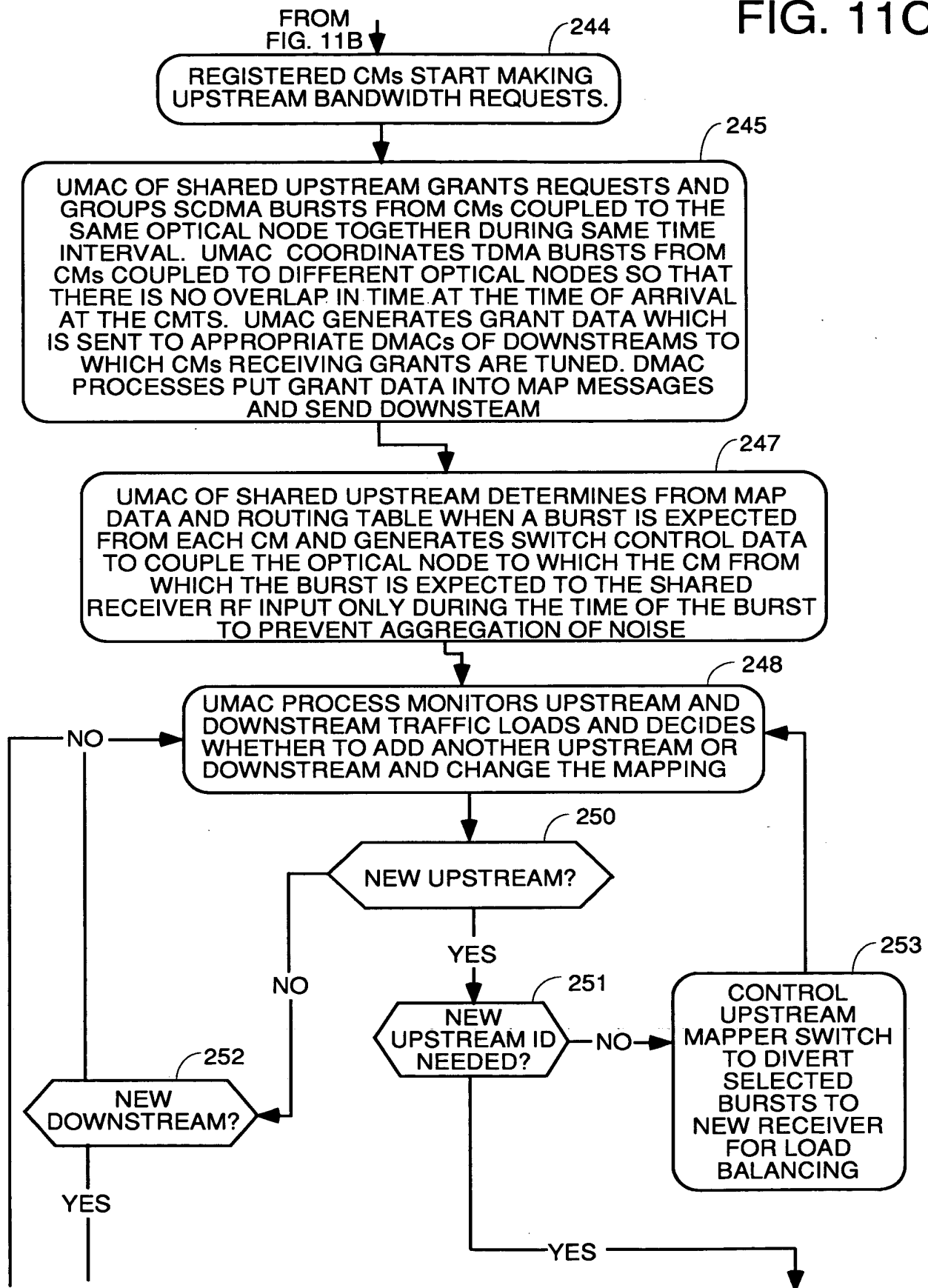


FIG. 11B

15 / 17

FIG. 11C



16 / 17

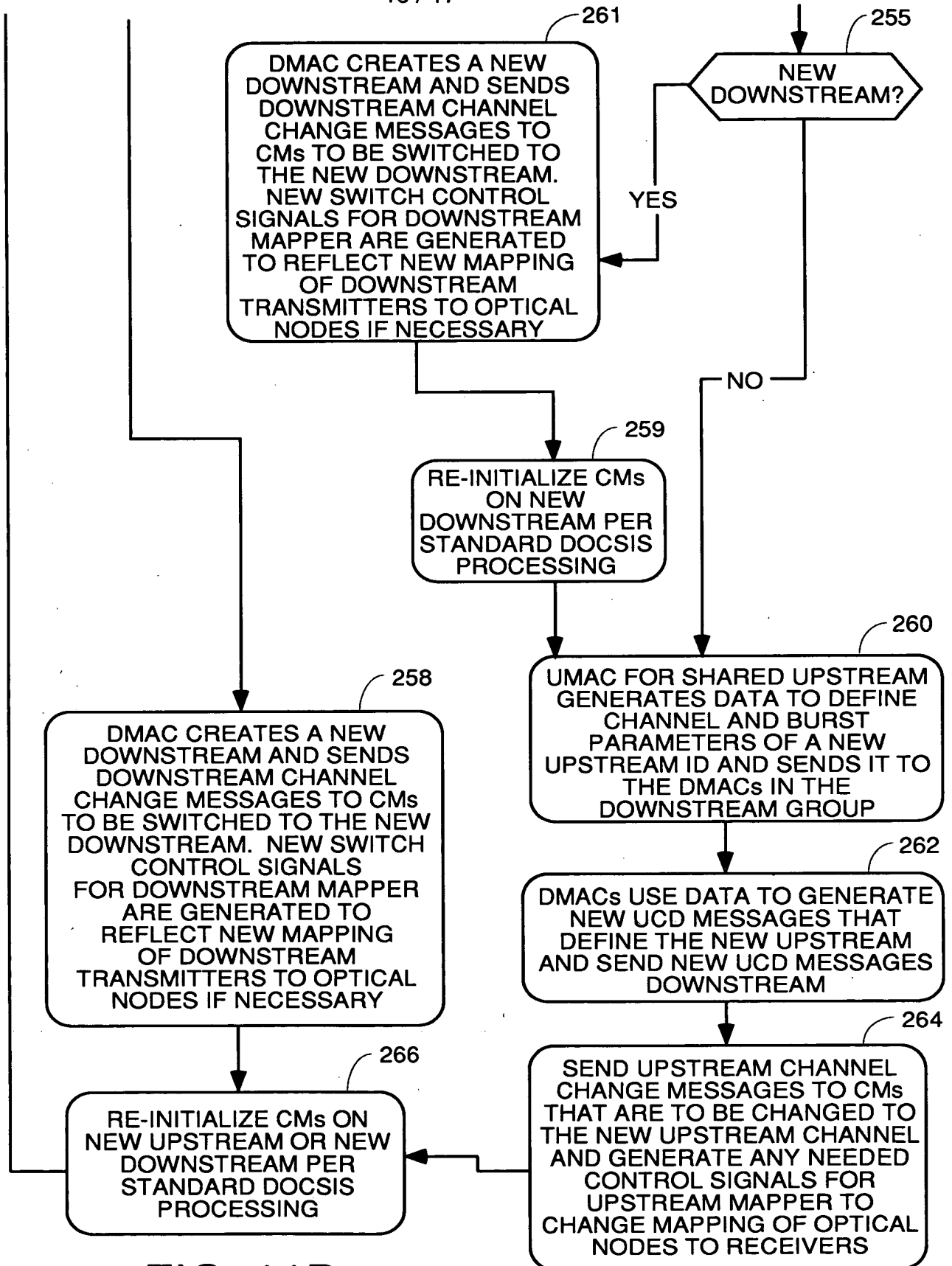


FIG. 11D



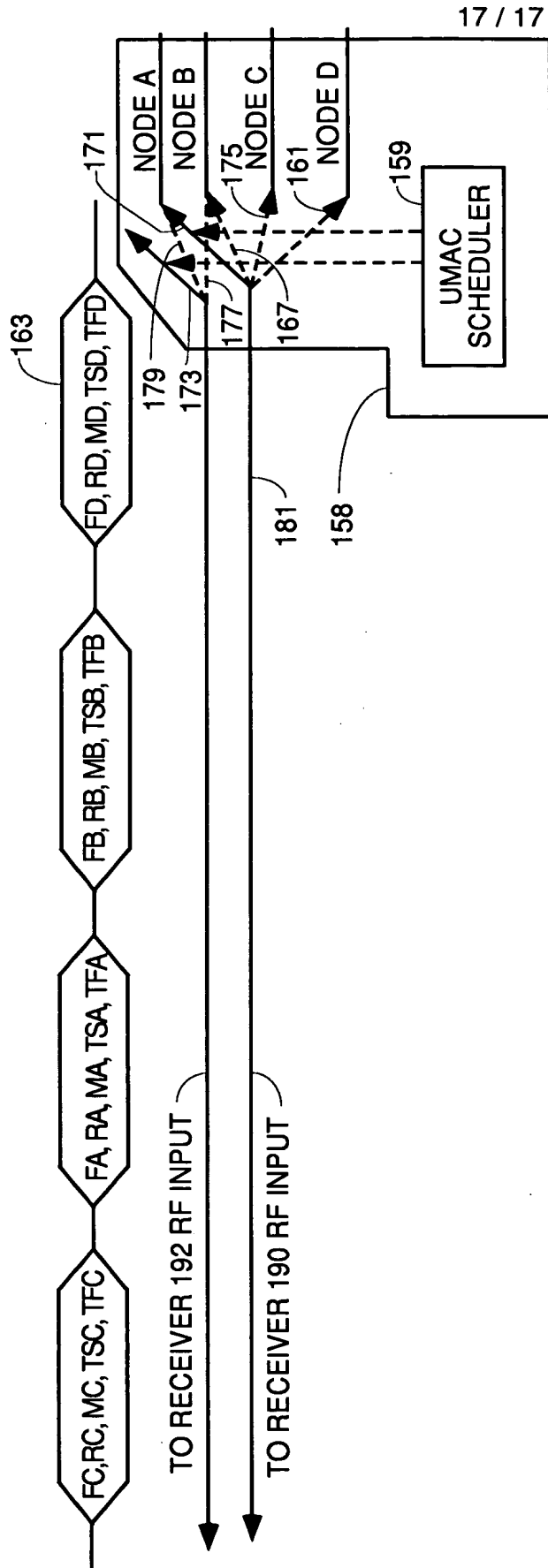


FIG. 12